

Some say study's 5-second rule findings are bologna

By Akron Beacon Journal, adapted by Newsela staff

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Tyler, 7, (left) and Logan, 5, have lunch with mom Cindy Waddell at a Chick-Fil-A on April 3, 2013.

Have you ever heard of the five second rule? It's an old belief about dropping food on the floor and having five seconds to pick it up. The rule says that if you wait longer than five seconds then you shouldn't eat it.

Recently, science students at Aston University in England tested the age-old five-second rule. They claim to have found some truth to it.

They discovered that the faster you pick food up off the floor the less likely it is to contain bacteria that could make you sick. Their study was released on the university's website on March 10.

Students worked under the direction of professor Anthony Hilton. They dropped toast, pasta, cookies and sticky candy on the floor and then left the food on the floor for three to 30 seconds.

Students then monitored the transfer of two common bacteria, *Escherichia coli* and *Staphylococcus aureus*. The common terms for these bacteria are called E.coli and staph.

Normally bacteria cannot be seen by the human eye. You need a microscope to see bacteria—a single-celled creature.

The Good, The Bad ...

There are good bacteria and bad bacteria. All bacteria feed off the environment they live within. In some cases, that environment is the human body. Good bacteria is contained in yogurt and in the human gut where it helps break down food. Bad bacteria can cause infections in the body like a sore throat, tooth cavities and pneumonia—a lung infection that can make you very sick.

But the study in England found that bacteria do a pretty lousy job at moving from floor to food, especially when the food isn't left there long.

The type of surface mattered, too. The British study found that bacteria were least likely to transfer from carpet to food. The study also found that bacteria was most likely to transfer from laminate or tile to food.

But don't go picking fallen Fritos out of the rug just yet.

The study challenges earlier research done at Clemson University. Scientists at Clemson tested how fast a bacteria called Salmonella Typhimurium made its way from floors to bologna and bread. Researchers there found that it happened instantly.

The British study hasn't been released yet in a scientific magazine. That makes it impossible for other researchers to replicate the study and determine if the results are accurate.

... And The Nasty

Jeffrey T. LeJeune is a food safety expert in Ohio. He says he would be very "cautious about the results" of the British study and doesn't recommend reading too much into it.

LeJeune said eating food off the floor goes against nearly every recommended method for preventing illnesses caused by food. And scientists know from past research that our floors are littered with nasty bacteria that can make us sick.

Bacteria are present even in homes of people who have been educated about proper cleaning.

LeJeune said another possible problem with the British study is that it didn't test Norovirus—a virus that causes about half of illnesses from food. Viruses are even smaller than bacteria. The flu is another type of virus. The British study doesn't look at how fast Norovirus gets transferred to food.

LeJeune's bottom line: Don't eat food off the floor. Ever.

It may be true that fewer bacteria get transferred to food in five seconds than in 10 seconds, "but

waiting zero seconds is far better than waiting any seconds,” he said. “I think one second is too long.”